Opening Statement
Of U.S. Representative Judy Biggert (R-Il-13th)
Fueling the Future: On the Road to the Hydrogen Economy
Committee On Science
Subcommittee on Energy, Subcommittee on Research
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I want to welcome everyone to this joint hearing of the Energy and Research Subcommittees of the House Science Committee. Today we are going to get a status report on the progress of federal research efforts driving the development of fuel cells and the hydrogen to power them.

At last year's hearing on this topic, we closely examined two reports – one prepared by the National Academy of Sciences (NAS), the other by the American Physical Society (APS) –both of which emphasized the importance of basic research to the long-term success of the President's Hydrogen and FreedomCAR initiatives.

I'm pleased that President Bush took these recommendations to heart, and increased funding in his fiscal year 2006 budget request for the Department of Energy's Office of Science to address some of the fundamental obstacles to greater use of hydrogen and fuel cells. I am anxious to hear how the results of this basic research are being incorporated into the fuel cell and hydrogen technologies under development, and how they are shaping the research agenda going forward.

Hydrogen and fuel cells hold great promise for a cleaner and more efficient nation that is less dependent on foreign sources of oil. However, many of the benefits of a hydrogen economy, such as reduced greenhouse gas emissions, are not currently accounted for in the marketplace, which will make it difficult for hydrogen vehicles to compete with conventional technology. Even if all the technical challenges are met, and industry has the capability to produce hydrogen vehicles that are competitive with conventional vehicles, a successful hydrogen economy requires an enormous investment in new infrastructure. It also requires changes in regulations, standards, and, most importantly, in habits and attitudes.

That's another good reason for regular updates – like the one we will receive today – on research advances and technological breakthroughs related to fuel cells and the production, storage, and use of hydrogen. As policymakers, this insight will help guide related policy decisions. The National Academy of Sciences estimates that sales of hydrogen vehicles will not be significant enough for the full benefits of a hydrogen economy to be realized at least until 2025. But who knows? Technological advances, coupled with wise policy decisions, could facilitate speedier deployment and market penetration.

Finally, with oil at $60 a barrel, I hope some of the technologies resulting from our investment in fuel cell and hydrogen research – such as hybrid systems technologies and advanced lightweight materials – are making their way into the marketplace now. If deployed in conventional automobiles today, these technologies could immediately reduce emissions and our dependence on oil.

In this way, research designed to benefit the nation significantly in the long-term could benefit us marginally in the near-term, ultimately giving us a greater return on our investment in hydrogen and fuel cell research. We couldn't ask for more in this era of tight budgets.

We have a diverse panel of witnesses today representing some exceptional institutions engaged in all different kinds of hydrogen and fuel cell research. But before we hear from them, I want to recognize the Ranking Member of the Research Subcommittee, Ms. Hooley, for her opening statement.